

ABSTRACT

An automotive vehicle frame reinforcement system has a skeleton member
5 designed to be secured to a vehicle frame, such as a roof or pillar section. An
expandable material, such as an epoxy-based reinforcing foam, is disposed on the
skeleton member. Once the system is attached to the frame, the foam expands and
cures during an automobile assembly operation, bonding the reinforcement system to
the frame. As a result, the reinforcement system provides enhanced load distribution
10 over the vehicle frame without adding excessive weight.